

L Number	Hits	Search Text	DB	Time stamp
41	36	((("6082333") or ("0320645") or ("1504363") or ("2464744") or ("6199539") or ("6209804") or ("1923775") or ("4665960") or ("1678640") or ("1693838") or ("3531144") or ("5215336") or ("4600222") or ("3572779") or ("2121624") or ("2479499") or ("1693838") or ("4365696") or ("3017203") or ("3848901") or ("4348956") or ("3369828") or ("3726547") or ("2728895") or ("2374225") or ("2164017") or ("2147355") or ("2139745") or ("3380765") or ("4905766") or ("4341481") or ("5321205") or ("2453813") or ("4951974") or ("2374225") or ("2479499") or ("5607107") or ("2374225") or ("2430921") or ("4807351")).PN.	USPAT; US-PGPUB	2004/08/13 16:15
43	6	285/\$.ccls. and "anti-rotation"	USOCR	2004/08/13 16:16
42	168	285/\$.ccls. and "anti-rotation"	USPAT; US-PGPUB	2004/08/13 16:28
44	168	285/\$.ccls. and "anti rotation"	USPAT; US-PGPUB	2004/08/13 16:28
45	176	285/\$.ccls. and (anti near rotation)	USPAT; US-PGPUB	2004/08/13 16:30
46	8	(285/\$.ccls. and (anti near rotation)) not (285/\$.ccls. and "anti-rotation")	USPAT; US-PGPUB	2004/08/13 16:29
47	8	285/\$.ccls. and (anti near rotation)	USOCR	2004/08/13 16:29
48	3	285/\$.ccls. and (anti near rotation)	EPO; JPO; DERWENT; IBM_TDB	2004/08/13 16:32
51	102	MATSUBARA-ET-AL and pipe	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/08/13 16:34
50	87	MATSUBARA-SATOSHI	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/08/13 16:36
49	14	KAISHIO-ET-AL KAISHIO-MITSUO	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/08/13 16:37
54	56	@pd>20040301 and (285/319,328,233,39,305,308).ccls.	USPAT; US-PGPUB	2004/08/13 16:51
55	895	(285/330).CCLS.	USPAT; US-PGPUB	2004/08/13 16:51
-	121	(285/233).CCLS.	USPAT; US-PGPUB	2004/08/13 16:12
-	926	(285/319).CCLS.	USPAT; US-PGPUB	2004/03/06 15:54
-	1	("2500720").PN.	USPAT; US-PGPUB	2004/03/06 16:19
-	18	2500720.URPN.	USPAT	2004/03/06 16:19
-	5	("3158388" "2500720" "2309596" "2470546" "3493250").PN.	USPAT	2004/03/06 16:21
-	16	3685860.URPN.	USPAT	2004/03/06 16:22
-	459	(285/328).CCLS.	USPAT; US-PGPUB	2004/03/06 16:23
-	922	(285/39).CCLS.	USPAT; US-PGPUB	2004/03/06 16:33
-	1150	(285/305,308).CCLS.	USPAT; US-PGPUB	2004/03/06 16:43
-	5	("3158388" "2500720" "2309596" "2470546" "3493250").PN.	USPAT	2004/03/06 17:06
-	16	3685860.URPN.	USPAT	2004/03/06 17:06

-	15	("0921691" "1504363" "2892991" "3255521" "3826523" "3933378" "3997196" "4055359" "4135745" "4401326" "4440424" "4601497" "4637640" "4647082" "4691943").PN.	USPAT	2004/03/06 17:07
-	67	4793637.URPN.	USPAT	2004/03/06 17:08
-	1	("5542716").PN.	USPAT; US-PGPUB	2004/03/06 17:30

Art Unit: 3753

This office action is responsive to communications filed 11/06/2003.

Claims 1 – 21 are pending.

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1 – 4, 8 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Schindel (US 2,882,922).

Schindel discloses a spring-loaded pressure relief valve (15), particularly for containers of pressurized fluids, comprising a valve body (1) that is associable with a container and forms a discharge port (6) that is controlled by a main piston (38), an auxiliary valve (3,17,32) being further provided which controls a venting port (25) and drives the intervention of said main piston, wherein said main piston is accommodated in a cavity (23, 24) that is formed in said valve body and is open in an axial direction on the opposite side with respect to said venting port. The pressure relief valve comprises a cylindrical wall (9) that can be coupled to said piston body (38) and forms a chamber for accommodating a main spring (53) that pushes against said main piston, said chamber being connected to the inside of the container by means of a channel that has a small diameter. The auxiliary valve has an auxiliary valve body (3, 17) that can be applied in a valve seat (18) that forms said venting port, and being supported by an auxiliary piston (32) on which an auxiliary spring (34) acts, said auxiliary spring being

Art Unit: 3753

connected at its other end to a setting ring (36) that is accommodated in said auxiliary valve body.

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 5 – 7 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schindel (US 2,882,922) as applied to claims 1 – 5, 8 and 9 above, and further in view of EP 0 717 821 B1.

The patent to Schindel discloses the claimed invention with the exception of explicitly disclosing a gasket like sealing element disposed on either the main piston or the auxiliary piston.

The document EP 0 717 821 B1 discloses that it is known in the art to provide a piston (5) having an annual sealing gasket (20) for the purpose of providing reliable seal.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided in main piston and the auxiliary piston a sealing ring for the purpose of providing a reliable seal as recognized by EP 0 717 821 B1. The specific cross-section of the ring is an obvious design expedient over those features disclosed in the combination of Schindel and EP 0 717 821 B1 in that it neither solves any stated problem nor provides any new and/or unexpected result.

5. Claims 11 – 21 are allowed.

Art Unit: 3753

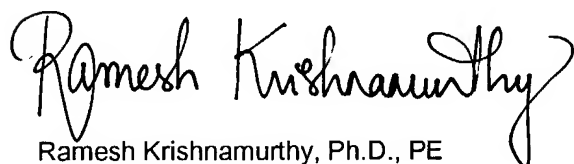
6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ramesh Krishnamurthy whose telephone number is (703) 305 - 5295. The examiner can normally be reached on Monday - Friday from 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A. Scherbel, can be reached on (703) 308 - 1272. The fax phone number for the organization where this application or proceeding is assigned is (703) 872 - 9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308 - 0861.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Ramesh Krishnamurthy, Ph.D., PE
Primary Examiner
Art Unit 3753